

14/03/2007,10568495c.trn

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTASXY1626

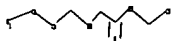
PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 13:31:17 ON 13 MAR 2007
FILE 'REGISTRY' ENTERED AT 13:31:17 ON 13 MAR 2007
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.90	187.28
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-0.78

=>

Uploading C:\Program Files\Stnexp\Queries\10568495c.str



chain nodes :

1 3 4 5 6 7 8 9 10 11 12

chain bonds :

1-3 3-4 4-5 5-6 6-7 7-8 8-9 8-10 9-11 11-12

exact/norm bonds :

1-3 5-6 6-7 8-9 8-10 9-11

exact bonds :

3-4 4-5 7-8 11-12

G1:Cb,Ak,O,S,N

14/03/2007,10568495c.trn

Match level :

1:CLASS 3:Atom 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS

Generic attributes :

3:

Saturation : Unsaturated

4:

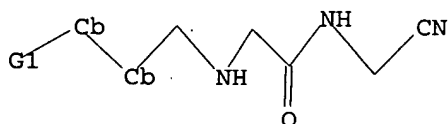
Saturation : Unsaturated

L7 STRUCTURE UPLOADED

=> d 17

L7 HAS NO ANSWERS

L7 STR



G1 Cb,Ak,O,S,N

Structure attributes must be viewed using STN Express query preparation.

=> s 17

SAMPLE SEARCH INITIATED 13:32:07 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 562 TO ITERATE

100.0% PROCESSED 562 ITERATIONS

3 ANSWERS

SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 9818 TO 12662

PROJECTED ANSWERS: 3 TO 163

L8 3 SEA SSS SAM L7

=> s 17 full

FULL SEARCH INITIATED 13:32:14 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 12073 TO ITERATE

100.0% PROCESSED 12073 ITERATIONS

124 ANSWERS

SEARCH TIME: 00.00.01

L9 124 SEA SSS FUL L7

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

173.45

359.83

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

14/03/2007,10568495c.trn

CA SUBSCRIBER PRICE

0.00

-0.78

FILE 'HCAPLUS' ENTERED AT 13:32:18 ON 13 MAR 2007

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FILE COVERS 1907 - 13 Mar 2007 VOL 146 ISS 12

FILE LAST UPDATED: 11 Mar 2007 (20070311/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l9

L10 14 L9

=> d ed abs ibib hitstr 1-14

14/03/2007,10568495c.trn

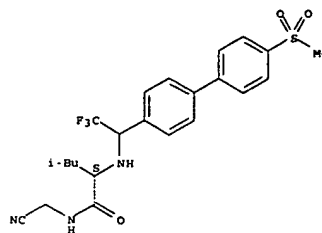
L10 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN
ED Entered STN: 01 Feb 2007
AB The invention relates to the treatment of parasitic disease with inhibitors of the papain family cysteine proteases. The parasitic diseases include toxoplasmosis, malaria, African trypanosomiasis, Chagas disease, leishmaniasis and schistosomiasis. The invention also relates to the pharmaceutical compns. comprising a papain family cysteine protease inhibitor and another agent in the treatment for parasitic disease.
ACCESSION NUMBER: 2007:113649 HCAPLUS
DOCUMENT NUMBER: 146:177158
TITLE: Papain family cysteine protease inhibitors for the treatment of parasitic diseases
INVENTOR(S): Black, Cameron; Mellon, Christophe; Nicoll-Griffith, Deborah Anne; Oballa, Renata
PATENT ASSIGNEE(S): Merck Frosst Canada Ltd., Can.
SOURCE: PCT Int. Appl., 42pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007012180	A1	20070201	WO 2006-CA1216	20060724
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CP, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

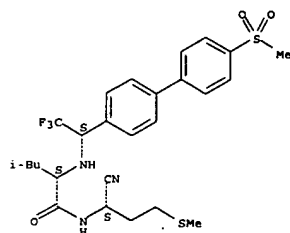
PRIORITY APPLN. INFO.: US 2005-702455P P 20050726

IT 603139-99-7P 603141-70-4P 603141-71-5P
847361-57-3P 922138-48-5P 922138-49-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(papain family cysteine protease inhibitors for treatment of parasitic diseases and combination with other agents)
RN 603139-99-7 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)
INDEX NAME)
Absolute stereochemistry.

L10 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

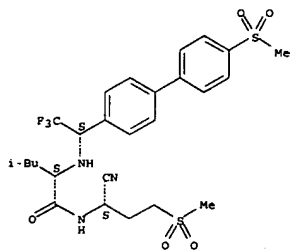


RN 603141-70-4 HCAPLUS
CN Pentanamide, N-[(1S)-1-cyano-3-(methylthio)propyl]-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)
Absolute stereochemistry.

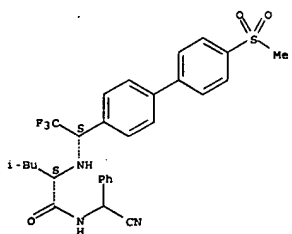


RN 603141-71-5 HCAPLUS
CN Pentanamide, N-[(1S)-1-cyano-3-(methylsulfonyl)propyl]-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)
Absolute stereochemistry.

L10 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

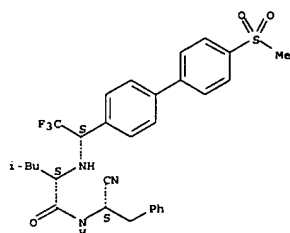


RN 847361-57-3 HCAPLUS
CN Pentanamide, N-(cyanophenylmethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)
Absolute stereochemistry.

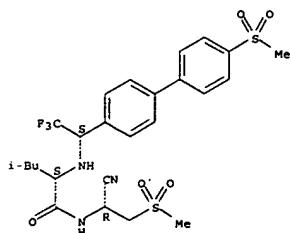


RN 922138-48-5 HCAPLUS
CN Pentanamide, N-[(1S)-1-cyano-2-phenylethyl]-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)-(CA INDEX NAME)
Absolute stereochemistry.

L10 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 922138-49-6 HCAPLUS
CN Pentanamide, N-[(1R)-1-cyano-2-(methylsulfonyl)ethyl]-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)
Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L10 ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN

ED Entered STN: 28 Jul 2006

AB The invention relates to the treatment of obesity, the treatment of obesity-related disorders, prevention of weight gain, prevention of weight regain or for weight maintenance, by the use of a cathepsin K inhibitor as active ingredient, alone or in conjunction with other anti-obesity agents.

The invention also relates to pharmaceutical compns. comprising cathepsin K inhibitors as active ingredients, pharmaceutically acceptable carriers or excipients, and optionally one or more anti-obesity agents.

ACCESSION NUMBER: 2006:735916 HCAPLUS

DOCUMENT NUMBER: 145:159867

TITLE: Cathepsin K inhibitors for the treatment of obesity and obesity-related disorders

INVENTOR(S): Percival, Michael David

PATENT ASSIGNEE(S): Merck Frost Canada Ltd., Can.

SOURCE: PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006076796	A1	20060727	WO 2006-CA54	20060117
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: US 2005-644926P P 20050119

OTHER SOURCE(S): MARPAT 145:159867

IT 603139-12-4 603139-13-5

RL: PAC (Pharmacological activity): THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cathepsin K inhibitors for treatment of obesity and obesity-related disorders)

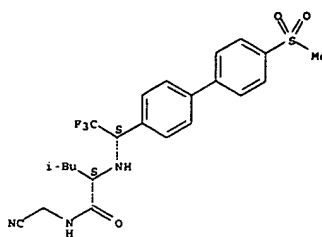
RN 603139-12-4 HCAPLUS

CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[1S]-2,2,2-trifluoro-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)-(9CI) (CA

INDEX NAME)

Absolute stereochemistry. Rotation (+).

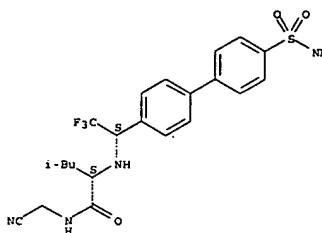
L10 ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)



RN 603139-13-5 HCAPLUS

CN Pentanamide, 2-[[[1S]-1-[4'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L10 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN

ED Entered STN: 27 Jul 2006

AB This invention relates to a genus of compds., such as N1-(1-cyanocyclopropyl)-4-fluoro-N2-[[[1S]-2,2,2-trifluoro-1-[4'-(methylsulfonyl)-1,1'-biphenyl-4-yl]ethyl]-L-leucinamide or N-1-[[[1-cyanomethyl]amino]carbonyl]cyclohexyl]-4-(4-propylpiperazin-1-yl)benzamide, which are inhibitors of cathepsin K. These compds. are useful for treating or preventing atherosclerosis and atherosclerotic cardiovascular disease.

ACCESSION NUMBER: 2006:733104 HCAPLUS

DOCUMENT NUMBER: 145:159834

TITLE: Cathepsin K inhibitors and atherosclerosis

INVENTOR(S): Percival, Michael David

PATENT ASSIGNEE(S): Merck Frost Canada Ltd., Can.

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006076797	A1	20060727	WO 2006-CA55	20060117
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: US 2005-644938P P 20050119

OTHER SOURCE(S): MARPAT 145:159834

IT 603139-13-5 603141-37-3

RL: PAC (Pharmacological activity): THU (Therapeutic use); BIOL (Biological study); USES (Uses)

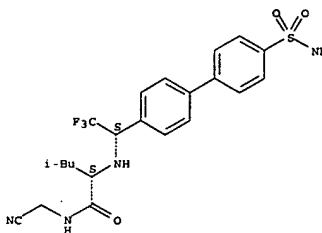
(cathepsin K inhibitors and treatment of atherosclerosis and atherosclerotic cardiovascular diseases and combination with other agents)

RN 603139-13-5 HCAPLUS

CN Pentanamide, 2-[[[1S]-1-[4'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

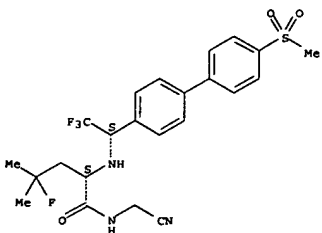
L10 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)



RN 603141-37-3 HCAPLUS

CN Pentanamide, N-(cyanomethyl)-4-fluoro-4-methyl-2-[[[1S]-2,2,2-trifluoro-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

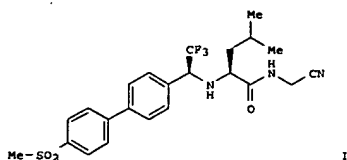
Absolute stereochemistry.



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L10 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN
 ED Entered STN: 07 May 2006
 GI



AB A practical, chromatog.-free synthesis of potent cathepsin K inhibitor I is described. The addition of 4-bromophenyllithium to an α -trifluoromethylimine derived from com. available (S)-leucinol was accomplished in a highly diastereoselective manner (97.6% de, 91% yield). Subsequent Suzuki cross-coupling afforded the biaryl derivative

Oxidation of the alc. and sulfide functionalities led to the formation of carboxylic acid. Crystallization of the biaryl intermediate and the acid as its dicyclohexylamine

salt gave excellent impurity rejection. The final amide coupling with com. available aminoacetonitrile hydrochloride afforded I in excellent purity (99.6% by HPLC, 100% de, <3 ppm Pd, W, Cr).

ACCESSION NUMBER: 2006:413175 HCAPLUS

DOCUMENT NUMBER: 145:124273

TITLE: Diastereoselective Aryllithium Addition to an α -Trifluoromethyl Imine. Practical Synthesis of a Potent Cathepsin K Inhibitor

AUTHOR(S): Roy, Amelie; Gosselin, Francis; O'Shea, Paul D.; Chen,

CORPORATE SOURCE: Cheng-Y. Department of Process Research, Merck Frosst Centre for Therapeutic Research, Kirkland, QC, H9H 3L1, Can. Journal of Organic Chemistry (2006), 71(11),

SOURCE: 4320-4323

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 145:124273

IT 603139-12-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of a potent cathepsin K inhibitor by diastereoselective aryllithium addition to an α -trifluoromethyl imine)

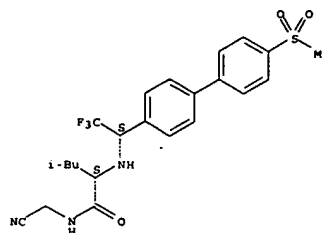
RN 603139-12-4 HCAPLUS

CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[(1S)-2,2,2-trifluoro-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)- (9CI) (CA

INDEX

L10 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 NAME)

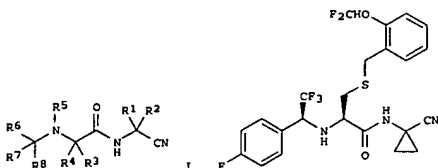
Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L10 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN
 ED Entered STN: 31 Mar 2006
 GI



AB The present invention is directed to a novel process for preparing cyanomethyl peptide analogs I (R1 = H, alkyl; R2 = H, alkyl, haloalkyl, carboxyalkyl, alkoxy-carbonylalkyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heteroaryl, heterocycloalkyl, heterocycloalkylalkyl, CN, etc.; or R1 and R2 may form cycloalkyl or heterocycloalkyl ring; R3 = H, alkyl; R4 = alkyl, haloalkyl, cycloalkylalkyl, aryl, aralkyl, heteroaryl, heterocycloalkyl, heterocycloalkylalkyl, etc.; or R3 and R4 may form cycloalkyl ring; R5 = H, alkyl; R6 = (un)substituted cycloalkyl, aryl, aralkyl, heteroaryl, heterocycloalkyl, heterocycloalkylalkyl; R7 = haloalkyl, R8 = H, alkyl, haloalkyl) or pharmaceutically acceptable salts thereof, useful as cysteine protease inhibitors (no data). Thus, N-alkylation of S-(2-difluoromethoxybenzyl)-L-cysteine (preparation given) with 2,2,2-trifluoro-1-(4-fluorophenyl)ethyl triflate (preparation given),

followed by S-oxidation and amidation with 1-aminocyclopropanecarbonitrile (preparation given) gave cyanocyclopropyl peptide analog II after column chromatog.

ACCESSION NUMBER: 2006:298556 HCAPLUS

DOCUMENT NUMBER: 144:350977

TITLE: Methods for the preparation of cyanomethyl peptide analogs useful as cysteine protease inhibitors

INVENTOR(S): Li, Jiayao

PATENT ASSIGNEE(S): Akys Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 101 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006034004	A2	20060330	WO 2005-US33051	20050916
WO 2006034004	A3	20061123		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN.				

L10 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CP, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPL. INFO.: US 2004-610806P P 20040917

OTHER SOURCE(S): MARPAT 144:350977

IT 603139-12-4P 603139-13-SP

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(methods for the preparation of cyanomethyl peptide analogs useful as cysteine protease inhibitors)

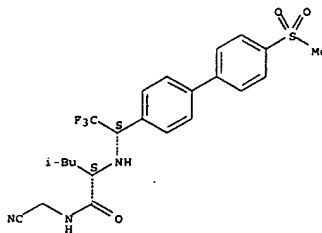
RN 603139-12-4 HCAPLUS

CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[(1S)-2,2,2-trifluoro-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)- (9CI) (CA

INDEX

NAME)

Absolute stereochemistry. Rotation (+).



RN 603139-13-5 HCAPLUS

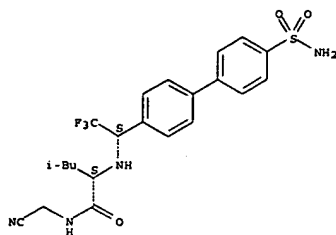
CN Pentanamide, 2-[(1S)-1-[4'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-2,2,2-trifluoroethyl]amino-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX

NAME)

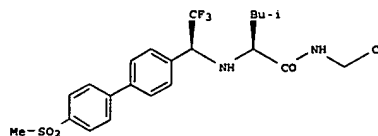
Absolute stereochemistry.

14/03/2007,10568495c.trn

L10 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L10 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN
ED Entered STN: 02 Mar 2006
GI



AB Based on our previous study with trifluoroethylamine as a P2-P3 amide isostere of cathepsin K inhibitor, further optimization led to identification of L-873724 (I) as a potent and selective non-basic cathepsin K inhibitor. This compound showed excellent pharmacokinetics and

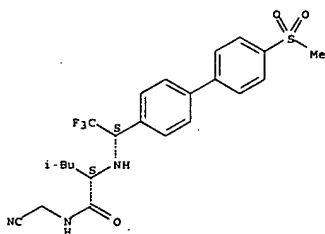
efficacy in an ovariectomized (OVX) rhesus monkey model. The vols. of distribution close to unity were consistent with this compound not being lysosomotropic, which is a characteristic of basic cathepsin K inhibitors.

ACCESSION NUMBER: 2006:188910 HCAPLUS
DOCUMENT NUMBER: 144:403771
TITLE: Identification of a potent and selective non-basic cathepsin K inhibitor
AUTHOR(S): Li, Chun Sing; Deschenes, Denis; Desmarais, Sylvie; Falgout, Jean-Pierre; Gauthier, Jacques Yves; Kimmel, Donald B.; Leger, Serge; Masse, Frederic; McGrath, Mary E.; McKay, Daniel J.; Percival, M. David; Riendeau, Denis; Rodan, Sevgi B.; Therien, Michel; Truong, Vouy-Linh; Wesolowski, Gregg;

Zamboni, Robert; Black, W. Cameron
CORPORATE SOURCE: Merck Frosst Centre for Therapeutic Research, Pointe-Claire-Dorval, QC, H9R 4P8, Can.
SOURCE: Bioorganic & Medicinal Chemistry Letters (2006), 16(7), 1985-1989
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 603139-12-4P
RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
RN 603139-12-4 HCAPLUS

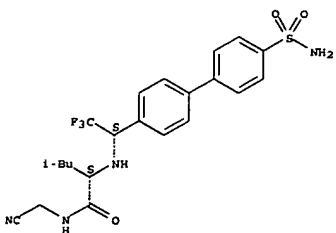
L10 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(4'-methylethylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 603139-13-5P
RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
RN 603139-13-5 HCAPLUS
CN Pentanamide, 2-[[[(1S)-1-(4'-aminosulfonyl)[1,1'-biphenyl]-4-yl]-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

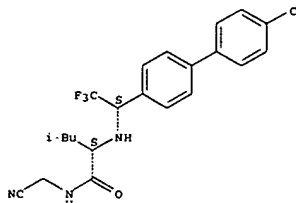


IT 603139-65-7P 603140-08-5P 603140-40-5P
603140-50-7P 603140-54-1P 603141-12-4P

L10 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

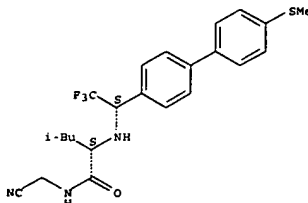
RN 603139-65-7 HCAPLUS
CN Pentanamide, 2-[[[(1S)-1-(4'-cyano[1,1'-biphenyl]-4-yl)-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 603140-08-5 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(4'-methoxythio)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

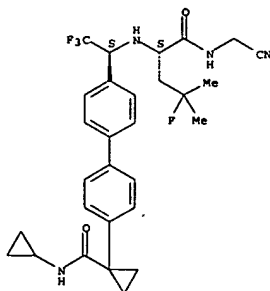
Absolute stereochemistry.



RN 603140-40-5 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(4'-methoxythio)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

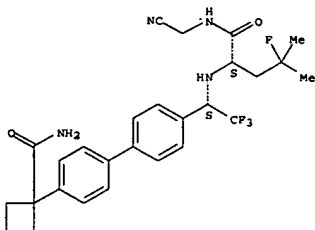
Absolute stereochemistry.

L10 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 854368-19-2 HCAPLUS
 CN Cyclobutanecarboxamide, 1-[4'-{[(1S)-1-[[[(1S)-1-[[[(cyanomethyl)amino]carbonyl]-3-fluoro-3-methylbutyl]amino]-2,2,2-trifluoroethyl][1,1'-biphenyl]-4-yl]}- (9CI) (CA INDEX NAME)

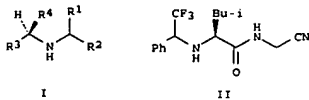
Absolute stereochemistry.



RN 854368-47-6 HCAPLUS
 CN Cyclopropanecarboxamide, 1-[4'-{[(1S)-1-[[[(1S)-1-[[[(cyanomethyl)amino]carbonyl]-3-fluoro-3-methylbutyl]amino]-2,2,2-trifluoroethyl][1,1'-biphenyl]-4-yl]}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN
 ED Entered STN: 11 Mar 2005
 GI



AB The invention relates to compds. I which are cysteine protease inhibitors, including but not limited to inhibitors of cathepsins K, L, S and B, and are useful for treating diseases in which inhibition of bone resorption

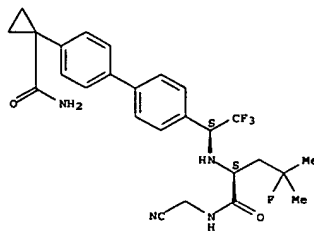
is indicated, e.g., osteoporosis, osteoarthritis and rheumatoid arthritis. Thus, a mixture of L-leucine Me ester hydrochloride, 2,2,2-trifluoroacetophenone, diisopropylethylamine and TiCl₄ in CH₂Cl₂ was stirred overnight, addnl. TiCl₄ added, and the mixture stirred an addnl.

3 h. A solution of NaCNBH₃ in MeOH was added and the mixture stirred 2 h to afford Me N-(2,2,2-trifluoro-1-phenylethyl)-L-leucinate. Saponification of the ester and reaction with aminocetonitrile hydrochloride in DMF in the presence of PyBOP and Et₃N yielded L-leucinamide derivative II.

ACCESSION NUMBER: 2005:219775 HCAPLUS
 DOCUMENT NUMBER: 142:280425
 TITLE: Preparation of amino acid derivatives as cathepsin inhibitors
 INVENTOR(S): Bayly, Christopher; Black, Cameron; McKay, Daniel J.
 PATENT ASSIGNEE(S): Merck Frost Canada & Co., Can.
 SOURCE: PCT Int. Appl., 106 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005021487	A1	20050310	WO 2004-CA1577	20040823
M:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RM:	BH, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004268707	A1	20050310	AU 2004-268707	20040823
CA 2535366	A1	20050310	CA 2004-2535366	20040823

L10 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

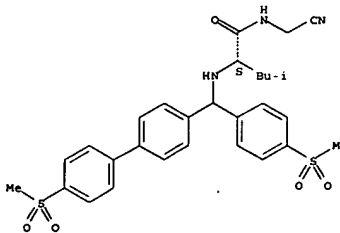


REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L10 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 EP 1660436 A1 20060531 EP 2004-761741 20040823
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
 CN 1842515 A 20061004 CN 2004-80024520 20040823
 JP 2007503401 T 20070222 JP 2006-524194 20040823
 US 2006287402 A1 20061221 US 2006-569351 20060222
 PRIORITY APPL. INFO.: US 2003-498017P P 20030827
 WO 2004-CA1577 W 20040823

OTHER SOURCE(S): MARPAT 142:280425
 IT 603139-08-8P 603139-12-4P 603141-70-4P
 603142-15-0P 847361-50-6P 847361-57-3P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of amino acid derive. as cathepsin inhibitors)
 RN 603139-08-8 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[4'-{(methylsulfonyl)[1,1'-biphenyl]-4-yl]}-4-(methylsulfonyl)phenyl]methyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

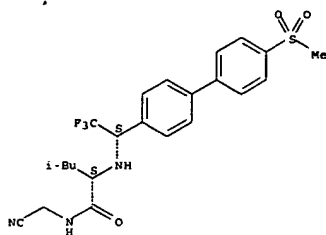
Absolute stereochemistry.



RN 603139-12-4 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[4'-{(methylsulfonyl)[1,1'-biphenyl]-4-yl]}-4-(methylsulfonyl)phenyl]methyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

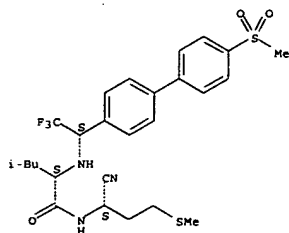
Absolute stereochemistry. Rotation (+).

L10 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)



RN 603141-70-4 HCAPLUS
 CN Pentanamide,
 N-((1S)-1-cyano-3-(methylthio)propyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)-(9CI)] (CA INDEX NAME)

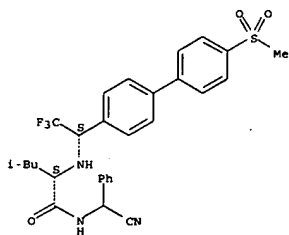
Absolute stereochemistry.



RN 603142-15-0 HCAPLUS
 CN Pentanamide,
 N-((1S)-1-cyano-1-methylethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)-(9CI)] (CA INDEX NAME)

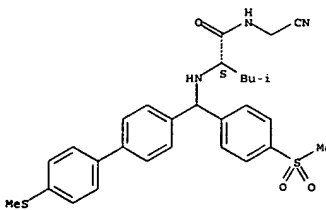
Absolute stereochemistry.

L10 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)



IT 603141-16-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of amino acid derive. as cathepsin inhibitors)
 RN 603141-16-8 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[4-(methylsulfonyl)phenyl][4'-(methylthio)[1,1'-biphenyl]-4-yl]methyl]amino]-, (2S)-(9CI)] (CA INDEX NAME)

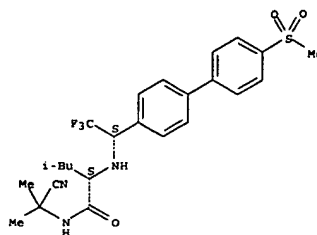
Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

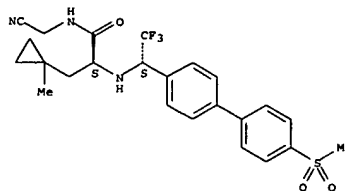
FORMAT

L10 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)



RN 847361-50-6 HCAPLUS
 CN Cyclopropanepropenamide, N-(cyanomethyl)-1-methyl-α-[[[(1S)-2,2,2-trifluoro-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (αS)-(9CI)] (CA INDEX NAME)

Absolute stereochemistry.



RN 847361-57-3 HCAPLUS
 CN Pentanamide,
 N-(cyanophenylmethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)-(9CI)] (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN

ED Entered STN: 04 Mar 2005

AB The invention relates to amino acid derive. H02C-Gn-E-D-CHRAHCHIRCONHCHIR2CN [R1, R2, R3 are independently H, (un)substituted alkyl or alkenyl; R4 is H or haloalkyl; D, E are independently (un)substituted aryl or heteroaryl; G is (un)substituted alkyl, alkoxy, aryl, heteroaryl, cycloalkyl, heterocyclyl, O, imino, S, SO, SO2 or CO; n is 1-3], which are cysteine protease inhibitors and are useful for treating diseases in which inhibition of bone resorption is indicated, e.g., osteoporosis. Thus, (S)-p-MeSO2C6H4C6H4-p-CH(CF3)-L-Leu-NHCH2CN

was prepared by a multistep sequence in which the reactants are L-leucinol, trifluoroacetaldehyde Me hemiacetal, 1,4-dibromobenzene, 4-(methylthio)phenylboronic acid, and aminoacetone nitrile hydrochloride.

ACCESSION NUMBER: 2005:182615 HCAPLUS
 DOCUMENT NUMBER: 142:280422
 TITLE: Preparation of amino acid derivatives as cathepsin cysteine protease inhibitors
 INVENTOR(S): Gauthier, Jacques Yves; Truong, Vouy Linh
 PATENT ASSIGNEE(S): Merck Frost Canada & Co., Can.
 SOURCE: PCT Int. Appl., 84 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005019161	A1	20050303	WO 2004-CA1524	20040819
M:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RM:	BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TO			
AU 2004266740	A1	20050303	AU 2004-266740	20040819
CA 2535359	A1	20050303	CA 2004-2535359	20040819
EP 1673336	A1	20060628	EP 2004-761688	20040819
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
CN 1839114	A	20060927	CN 2004-80023760	20040819
JP 2007502781	T	20070215	JP 2006-523498	20040819
US 2006287373	A1	20061221	US 2006-568495	20060215
PRIORITY APPLN. INFO.:			US 2003-496825P	P 20030821
			WO 2004-CA1524	M 20040819

OTHER SOURCE(S): MARPAT 142:280422

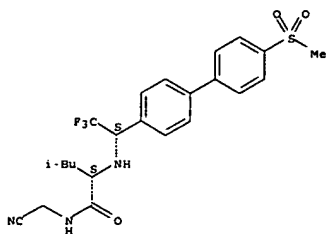
IT 603139-12-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of amino acid derive. as cathepsin cysteine protease inhibitors)

14/03/2007,10568495c.trn

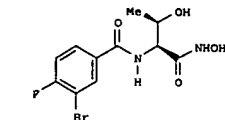
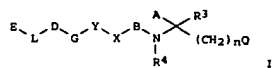
L10 ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
 RN 603139-12-4 HCAPLUS
 CN Pentenamide, N-(cyanomethyl)-4-methyl-2-[[[1S]-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-ylethylamino)-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

L10 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN
 ED Entered STN: 30 Jul 2004
 GI



AB Title compds. I [E = absent or H, (un)substituted-alkyl, -alkenyl, -aryl, etc.; L = absent or CONH, NHCO, (un)substituted alkyl, etc.; D = absent or (un)substituted-cycloalkyl, -aryl, -heterocyclyl or -heteroaryl; G = absent or alkene, alkene, CO, etc.; Y = (un)substituted-cycloalkyl, -aryl, -heterocyclyl or -heteroaryl; X = CO, alkylcarbonyl, alkenylcarbonyl, alkynylcarbonyl, methylene, or when B is absent X and A together form heterocyclic ring; B = absent or substituted aminoalkylcarbonyl; R3 = H or (un)substituted alkyl, or R3 and A together form a cycloalkyl or heterocyclic ring; R4 = H or (un)substituted alkyl, or R4 and A together form a heterocyclic ring; n = 0-2; A = H, acetylene, alkyl, etc.; Q = absent or substituted amide, SH, SO2NH2, CO2H, etc.] are disclosed: As well as stereoisomers, pharmaceutically acceptable salts, esters, and prodrugs thereof; pharmaceutical compns. comprising such compds.; methods of treating bacterial infections by the administration of such compds.; and processes for the preparation of the compds. Thus, e.g., II was prepared via amidation of 3-bromo-4-fluorobenzoic acid with L-threonine Me ester hydrochloride followed by substitution with hydroxylamine hydrochloride. This invention pertains generally to treating infections caused by gram-neg. bacteria. More specifically, the invention described pertains to treating gram-neg. infections by inhibiting activity of UDP-3-O-(R-3-hydroxydecanoyl)-N-acetylglucosamine deacetylase (LpxC). Many of I displayed an IC50 value of less than 10 µM with respect to inhibition of LpxC.

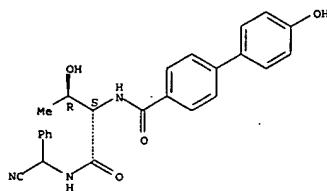
ACCESSION NUMBER: 2004:610055 HCAPLUS
 DOCUMENT NUMBER: 141:157473
 TITLE: Preparation of amino acid derivatives as antibacterial agents
 INVENTOR(S): Anderson, Neils H.; Bowman, Jason; Erwin, Alice;

L10 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
 Harwood, Eric; Kline, Toni; Mdluli, Khisimuzi; Ng, Simon; Pfister, Keith B.; Shawar, Ribhi; Wegman, Allan; Yabannavar, Asha
 Chiron Corporation, USA
 PCT Int. Appl., 324 pp.
 CODEN: PIXXDA
 Patent
 English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004062601	A2	20040729	WO 2004-US433	20040108
WO 2004062601	A3	20050421		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ				
AU 2004204760	A1	20040729	AU 2004-204760	20040108
CA 2512582	A1	20040729	CA 2004-2512582	20040108
US 2004229955	A1	20041118	US 2004-754928	20040108
EP 1618087	A2	20060125	EP 2004-700887	20040108
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1777577	A	20060524	CN 2004-80005935	20040108
JP 2006519772	T	20060831	JP 2006-500858	20040108
IN 2005KN1343	A	20060915	IN 2005-KN1343	20050712
US 2006154988	A1	20060713	US 2005-187708	20050722
PRIORITY APPLN. INFO.:			US 2003-438523P	P 20030108
			US 2003-466974P	P 20030430
			US 2003-520211P	P 20031113
			US 2004-754928	A1 20040108
			WO 2004-US433	W 20040108

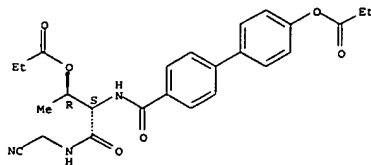
OTHER SOURCE(S): MARPAT 141:157473
 IT 728867-68-3P 728867-70-7P 728867-72-9P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug candidate; preparation of amino acid deriva. as antibacterial agents)
 RN 728867-68-3 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide,
 N-[(1S,2R)-1-[[[cyanophenylmethyl]amino]carbonyl]-2-hydroxypropyl]-4'-hydroxy- (9CI) (CA INDEX NAME)
 Absolute stereochemistry.

L10 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)



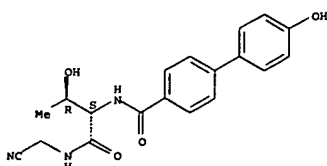
RN 728867-70-7 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide,
 N-[(1S,2R)-1-[[[cyanomethyl]amino]carbonyl]-2-(1-oxopropoxy)propyl]-4'-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

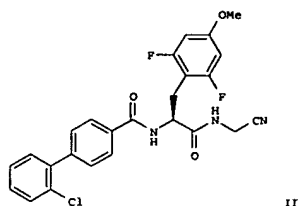
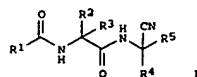


RN 728867-72-9 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide,
 N-[(1S,2R)-1-[[[cyanomethyl]amino]carbonyl]-2-hydroxypropyl]-4'-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L10 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN
ED Entered STN: 27 Jun 2004
OI

AB The dipeptide deriva. [I (R1 = substituted Ph, aryl, diaryl, heterodiarlyl, furanyl, arylfuranyl, pyrazolyl, etc.; R2 = H, (un)substituted cycloalkyl, indolyl, alkylindolyl, Me, Et, Pr, pentyl, etc.; R3 = H, or R2 and R3 together with the carbon atom to which they are attached formed (un)substituted cycloalkylene, cycloalkenylene or spirocycloalkylene; R4 = H; R5 = H, (un)substituted alkyl or heteroaryl, or R4' and R5 together with the carbon atom to which they are attached form cycloalkylene or heterocycloalkylene)] were prepared as cysteine protease inhibitors, in particular, cathepsins B, K, L, P, and S, for treating diseases mediated by these proteases. Thus, compound II was prepared via peptide coupling of 2'-chlorobiphenyl-4-carboxylic acid with synthesized 2(S)-amino-N-cyanomethyl-3-(2,6-difluoro-4-methoxyphenyl)-propionamide. Comps. of the invention were tested by in vitro essays for protease activity and showed cathepsins B, K, L, P, and S inhibitory activity.

ACCESSION NUMBER: 2004:515539 HCAPLUS
DOCUMENT NUMBER: 141:71829
TITLE: Cyanomethyl derivatives as cysteine protease inhibitors

L10 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

INVENTOR(S): Graupe, Michael; Leu, Agnes J.; Link, John O.; Liu, Yang; Mossman, Craig J.; Patterson, John W.; Zipfel, Sheila M.

PATENT ASSIGNER(S): Axya Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 134 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052921	A1	20040624	WO 2003-US37979	20031126
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, VZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2506114	A1	20040624	CA 2003-2506114	20031126
AU 2003298740	A1	20040630	AU 2003-298740	20031126
EP 1569954	A1	20050907	EP 2003-796499	20031126
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
US 2006122184	A1	20060608	US 2005-536889	20051017
PRIORITY APPL. INFO.:			US 2002-431354P	P 20021205
			WO 2003-US37979	W 20031126

OTHER SOURCE(S): MARPAT 141:71829

IT 710350-11-1P 710350-22-4P 710350-24-6P
710350-25-7P 710350-36-0P 710350-37-1P
710350-39-3P 710350-80-4P

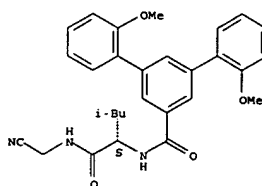
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of dipeptide cyanomethyl deriva. as cysteine protease inhibitors)

RN 710350-11-1 HCAPLUS
CN [(1,1',3',1''-Terphenyl)-5'-carboxamide, N-[[[1(S)-1-[[[cyanomethyl]amino]carbonyl]-3-methylbutyl]amino]carbonyl]-2,2''-dimethoxy- (9CI) (CA INDEX NAME)]

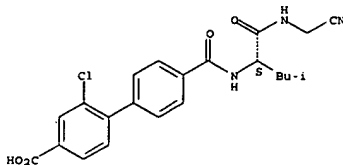
Absolute stereochemistry.

L10 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



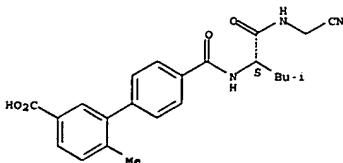
RN 710350-22-4 HCAPLUS
CN [(1,1'-Biphenyl)-4-carboxylic acid, 2-chloro-4'-[[[1(S)-1-[[[cyanomethyl]amino]carbonyl]-3-methylbutyl]amino]carbonyl]- (9CI) (CA INDEX NAME)]

Absolute stereochemistry.



RN 710350-24-6 HCAPLUS
CN [(1,1'-Biphenyl)-3-carboxylic acid, 4'-[[[1(S)-1-[[[cyanomethyl]amino]carbonyl]-3-methylbutyl]amino]carbonyl]-6-methyl- (9CI) (CA INDEX NAME)]

Absolute stereochemistry.

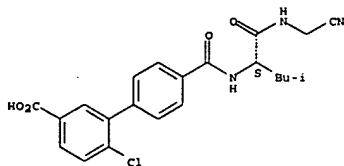


RN 710350-25-7 HCAPLUS

14/03/2007,10568495c.trn

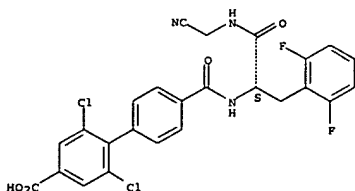
L10 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN [1,1'-Biphenyl]-3-carboxylic acid, 6-chloro-4'-[[[(1S)-1-
[[[cyanomethyl]amino]carbonyl]-3-methylbutyl]amino]carbonyl]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



RN 710350-36-0 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxylic acid, 2,6-dichloro-4'-[[[(1S)-2-
[[[cyanomethyl]amino]-1-[(2,6-difluorophenyl)methyl]-2-
oxoethyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

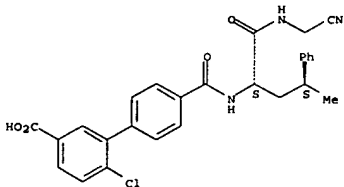
Absolute stereochemistry.



RN 710350-37-1 HCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 6-chloro-4'-[[[(1S)-2-
[[[cyanomethyl]amino]-1-[(2,6-difluoro-4-methoxyphenyl)methyl]-2-
oxoethyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

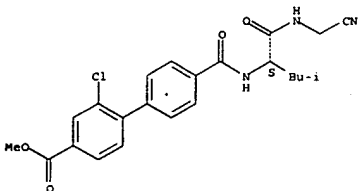
L10 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



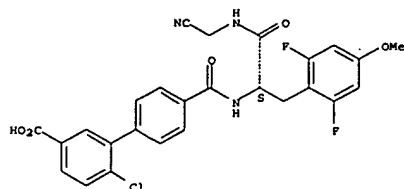
IT 710350-76-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of dipeptide cyanomethyl derivs. as cysteine protease
inhibitors)

RN 710350-76-8 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxylic acid, 2-chloro-4'-[[[(1S)-1-
[[[cyanomethyl]amino]carbonyl]-3-methylbutyl]amino]carbonyl]-, methyl
ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

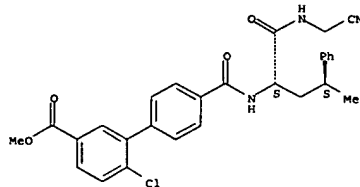


L10 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 710350-39-3 HCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 6-chloro-4'-[[[(1S,3S)-1-
[[[cyanomethyl]amino]carbonyl]-3-phenylbutyl]amino]carbonyl]-, methyl
ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 710350-80-4 HCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 6-chloro-4'-[[[(1S,3S)-1-
[[[cyanomethyl]amino]carbonyl]-3-phenylbutyl]amino]carbonyl]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN
ED Entered STN: 19 Sep 2003
AB This invention relates to cysteine protease inhibitors
R7(D)ncR6R7NRBCR3R4C(O)NHCRI2CN (R1-4 = H, (substituted)C1-6-alkyl or
C2-6-alkenyl; R1 and R2 or R3 and R4 may be taken together with the C atom
to which they are attached to form a (substituted)C3-6-cycloalkyl or
heterocyclic ring; R5 = H, (substituted)C1-6-alkyl; R6 =
(substituted)aryl, heteroaryl, C1-6-haloalkyl, arylalkyl, heteroarylalkyl;
D = (substituted)C1-3-alkyl, C2-3-alkenyl, C2-3-alkynyl, aryl,
heteroaryl,
C3-8-cycloalkyl, heterocyclyl; R7 = H, (substituted)C1-6-alkyl,
C2-6-alkenyl, C2-6-alkynyl, C1-6-alkoxy, etc.; R8 = H, C2-6-alkyl)
including but not limited to, inhibitors of cathepsins K, L, S and B.
These compounds are useful for treating diseases in which inhibition of
bone

resorption is indicated, such as osteoporosis.

ACCESSION NUMBER: 2003:737516 HCAPLUS

DOCUMENT NUMBER: 139:257284

TITLE: Cathepsin cysteine protease inhibitors and their
therapeutic use

INVENTOR(S): Bayly, Christopher I.; Black, Cameron; Leger, Serge;
Li, Chun Sing; McKay, Dan; Mellon, Christophe;
Gauthier, Jacques Yves; Lau, Cheuk; Therien, Michel;
Truong, Vouy-Linh; Green, Michael J.; Hirschbein,
Bernard L.; Janc, James W.; Palmer, James T.;
Baskaran, Chitra

PATENT ASSIGNEE(S): Merck Frost Canada & Co., Can.; Akxy
Pharmaceuticals, Inc.

SOURCE: PCT Int. Appl., 282 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

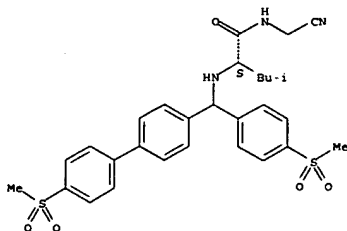
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003075836	A2	20030918	WO 2003-056147	20030228
WO 2003075836	A3	20040715		
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CA 2477657	A1	20030918	CA 2003-2477657	20030228
AU 2003219953	A1	20030922	AU 2003-219953	20030228
US 2003232863	A1	20031218	US 2003-377377	20030228
EP 1482924	A2	20041208	EP 2003-716238	20030228
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003008208	A	20050111	BR 2003-8208	20030228
CN 1438757	A	20050713	CN 2003-805181	20030228
JP 2005526753	T	20050908	JP 2003-574112	20030228
NZ 534583	A	20061130	NZ 2003-534583	20030228

14/03/2007,10568495c.trn

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
US 2005240023 A1 20051027 US 2004-505796 20040825
NO 2004004207 A 20041124 NO 2004-4207 20041004
PRIORITY APPLN. INFO.: US 2002-361818P P 20020305
US 2002-408704P P 20020906
WO 2003-US6147 W 20030228

OTHER SOURCE(S): MARPAT 139:357284
IT 603139-08-8P 603139-09-5P 603139-12-4P
603139-13-5P 603139-22-6P 603139-23-7P
603139-24-8P 603139-28-2P 603139-29-3P
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);
THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(cathepsin cysteine protease inhibitors and their therapeutic use)
RN 603139-08-8 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl][4-(methylsulfonyl)phenyl]methyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

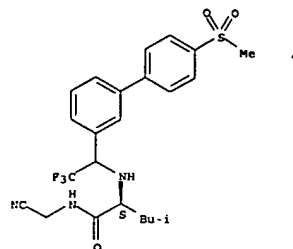
Absolute stereochemistry.



RN 603139-09-9 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[2,2,2-trifluoro-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

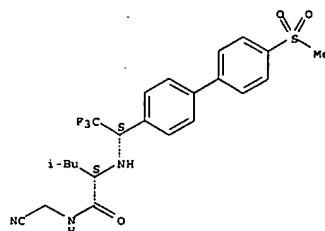
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603139-12-4 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[1S]-2,2,2-trifluoro-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

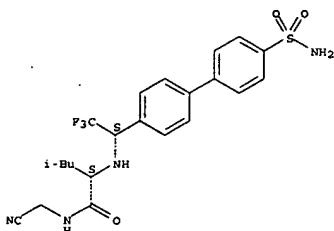
Absolute stereochemistry. Rotation (+).



RN 603139-13-5 HCAPLUS
CN Pentanamide, 2-[[[1S]-1-[4'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

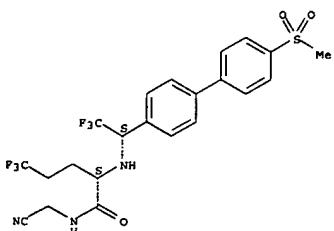
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603139-22-6 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-5,5,5-trifluoro-2-[[[1S]-2,2,2-trifluoro-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

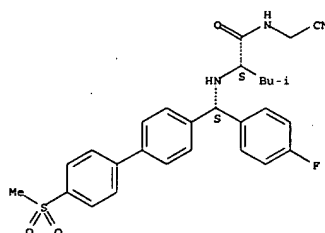
Absolute stereochemistry.



RN 603139-23-7 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-2-[[[1S]-4-fluorophenyl][4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]methyl]amino]-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

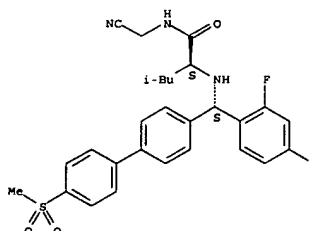
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603139-24-8 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-2-[[[1S]-2,4-difluorophenyl][4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]methyl]amino]-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

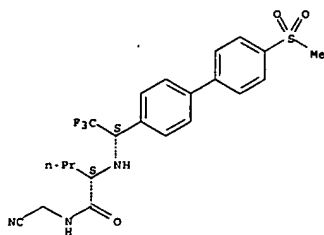
Absolute stereochemistry.



RN 603139-28-2 HCAPLUS
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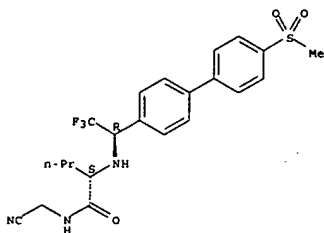
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



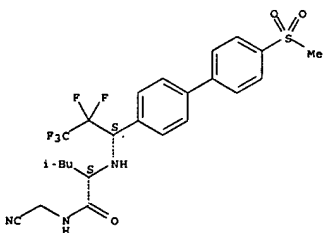
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Absolute stereochemistry.



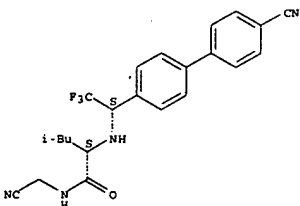
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L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603139-65-7 HCAPLUS
 CN Pentanamide, 2-[[[1S]-1-(4'-cyano[1,1'-biphenyl]-4-yl)-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 603139-67-9 HCAPLUS
 CN [1,1'-Biphenyl]-2-carboxylic acid, 4'-[1-[[[1-[[[1-cyanomethyl]amino]carbonyl]-3-methylbutyl]amino]-2,2,2-trifluoroethyl]-, methyl ester (9CI) (CA INDEX NAME)

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

603140-12-1P 603140-13-2P 603140-30-3P
 603140-40-5P 603140-46-1P 603140-50-7P
 603140-52-9P 603140-53-0P 603140-54-1P
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RI: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

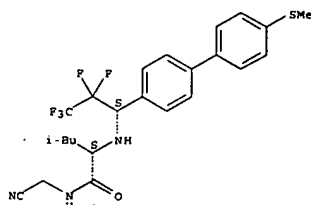
(cathepsin cysteine protease inhibitors and their therapeutic use)

RN 603139-56-6 HCAPLUS

CN Pentanamide,

N-(cyanomethyl)-4-methyl-2-[[[1S]-2,2,3,3,3-pentafluoro-1-(4'-(methylthio)[1,1'-biphenyl]-4-yl)propyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



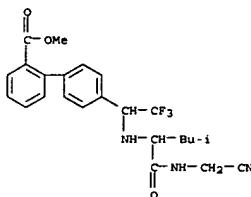
RN 603139-57-7 HCAPLUS

CN Pentanamide,

N-(cyanomethyl)-4-methyl-2-[[[1S]-2,2,3,3,3-pentafluoro-1-(4'-(methylthio)[1,1'-biphenyl]-4-yl)propyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

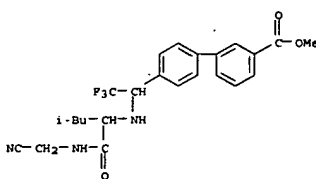
L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603139-68-0 HCAPLUS

CN [1,1'-Biphenyl]-3-carboxylic acid,

4'-[1-[[[1-[[[1-cyanomethyl]amino]carbonyl]-3-methylbutyl]amino]-2,2,2-trifluoroethyl]-, methyl ester (9CI) (CA INDEX NAME)



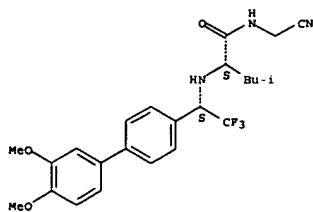
RN 603139-69-1 HCAPLUS

CN Pentanamide,

N-(cyanomethyl)-2-[[[1S]-1-(3',4'-dimethoxy[1,1'-biphenyl]-4-yl)-2,2,2-trifluoroethyl]amino]-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

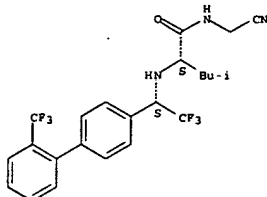
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603139-70-4 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(2'-(trifluoromethyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

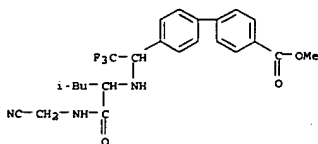
Absolute stereochemistry.



RN 603139-72-6 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(3'-formyl[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

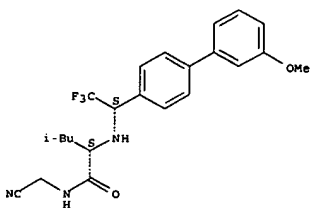
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



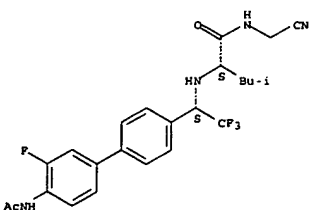
RN 603139-84-0 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(3'-methoxy[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



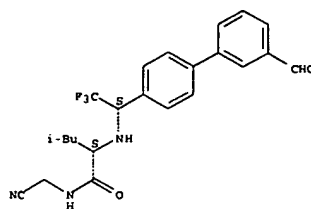
RN 603139-85-1 HCAPLUS
 CN Pentanamide, 2-[[[(1S)-1-(4'-acetylamino)-3'-fluoro[1,1'-biphenyl]-4-yl)-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



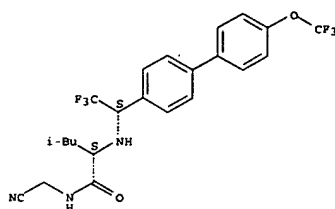
Young, Shawquia, Page 16

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603139-74-8 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(4'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

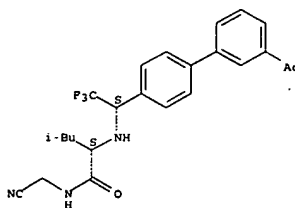


RN 603139-78-2 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxylic acid, 4'-[1-[[1-[[[cyanomethyl]amino]carbonyl]-3-methylbutyl]amino]-2,2,2-trifluoroethyl]-, methyl ester (9CI) (CA INDEX NAME)

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

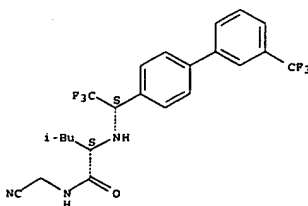
RN 603139-89-5 HCAPLUS
 CN Pentanamide, 2-[[[(1S)-1-(3'-acetyl[1,1'-biphenyl]-4-yl)-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 603139-90-8 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(3'-(trifluoromethyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

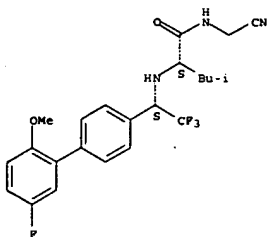
Absolute stereochemistry.



RN 603139-91-9 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-(5'-fluoro-2'-methoxy[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

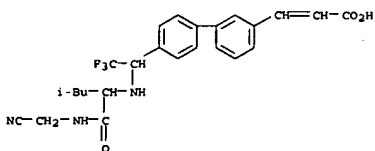
L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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RN  603139-94-2  HCAPLUS
CN  2-Propenoic acid, 3-[4'-[1-[[1-[[[cyanomethyl]amino]carbonyl]-3-
    methylbutyl]amino]-2,2,2-trifluoroethyl][1,1'-biphenyl]-3-yl]- (9CI) (CA
INDEX NAME)

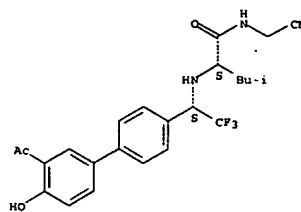
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RN 603139-97-5 HCAPLUS
CN Pentanamide, 2-[[[(1S)-1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-4-yl)-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

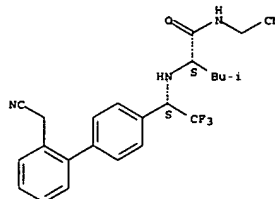
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603139-98-6 HCAPLUS
CN Pentanamide,
N-(cyanomethyl)-2-[[[1S]-1-[2'-(cyanomethyl)[1,1'-biphenyl]-4-yl]-2,2,2-trifluoroethyl]amino]-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

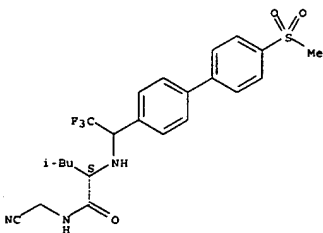
Absolute stereochemistry.



RN 603139-99-7 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[(2,2,2-trifluoro-1-(4'-
(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl)amino]-, (2S)- (9CI) (CA
INDEX
NAME)

Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

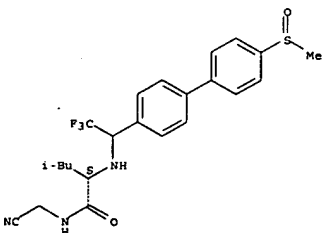


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RN      603140-00-7  HCAPIUS
CN      Pentanamide, N-(cyanomethyl)-4-methyl-2-[(2,2,2-trifluoro-1-[4'-(methylsulfinyl)[1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)- (9CI) (CA
INDEX   NAME)

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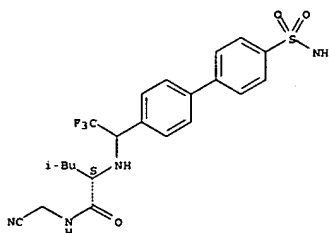
Absolute stereochemistry.



RN 603140-07-4 HCAPLUS
CN Pentanamide, 2-[[1-[4'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

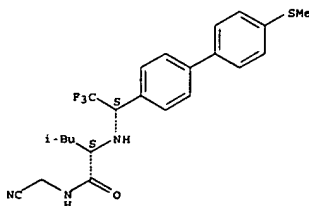
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603140-08-5 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[{(1S)-2,2,2-trifluoro-1-(4'-
(methylthio)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)- (9CI) (CA INDEX
NAME)

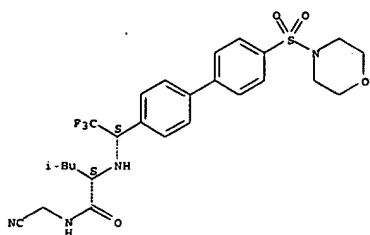
Absolute stereochemistry.



RN 603140-10-9 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[1S]-2,2,2-trifluoro-1-[4'-(4-morpholinyl)sulfonyl]-1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

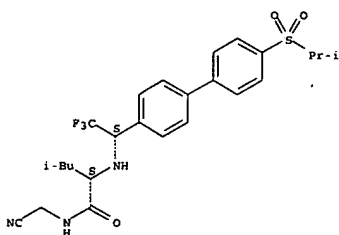
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603140-11-0 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-([(1S)-2,2,2-trifluoro-1-[4'-(methylsulfonyl)phenyl]-1'-biphenyl]-4-ylethyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

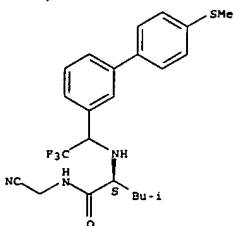
Absolute stereochemistry.



RN 603140-12-1 HCAPLUS
 CN Pentanamide, 2-([(1S)-1-[4'-(acetylaminosulfonyl)-1'-biphenyl]-4-yl]-2,2,2-trifluoroethyl)amino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

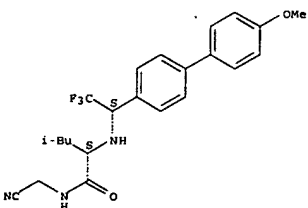
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603140-40-5 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-([(1S)-2,2,2-trifluoro-1-[4'-(methoxy)phenyl]-1'-biphenyl]-4-ylethyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

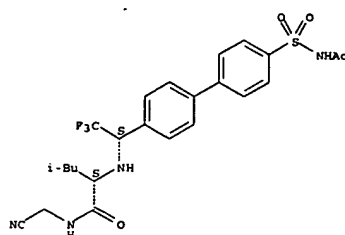
Absolute stereochemistry.



RN 603140-46-1 HCAPLUS
 CN Pentanamide, 2-([(1S)-1-[4'-(acetylaminosulfonyl)-1'-biphenyl]-4-yl]-2,2,2-trifluoroethyl)amino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

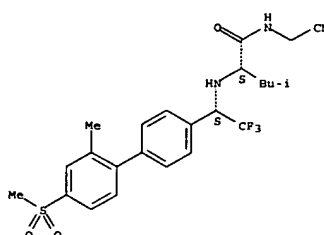
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603140-13-2 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-([(1S)-2,2,2-trifluoro-1-[2'-(methylsulfonyl)phenyl]-1'-biphenyl]-4-ylethyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

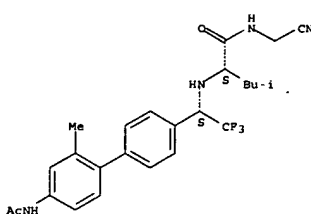
Absolute stereochemistry.



RN 603140-30-3 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-([(2,2,2-trifluoro-1-[4'-(methylthio)phenyl]-1'-biphenyl]-3-ylethyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

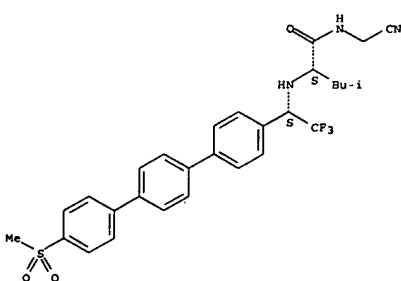
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603140-50-7 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-([(1S)-2,2,2-trifluoro-1-[4'-(methylthio)phenyl]-1'-biphenyl]-4-ylethyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

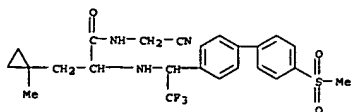
Absolute stereochemistry.



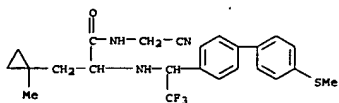
RN 603140-52-9 HCAPLUS
 CN Cyclopropanepentanamide, N-(cyanomethyl)-1-methyl-4-([(2,2,2-trifluoro-1-[4'-(methylsulfonyl)phenyl]-1'-biphenyl]-4-ylethyl)amino]-, (9CI) (CA INDEX NAME)

14/03/2007,10568495c.trn

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

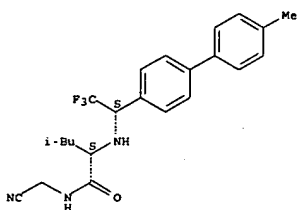


RN 603140-53-0 HCAPLUS
CN Cyclopropanepropanamide, N-(cyanomethyl)-1-methyl-α-[[2,2,2-trifluoro-1-[4'-(methylthio)(1,1'-biphenyl)-4-yl]ethyl]amino]- (9CI) (CA INDEX NAME)



RN 603140-54-1 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[1S]-2,2,2-trifluoro-1-(4'-methyl[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

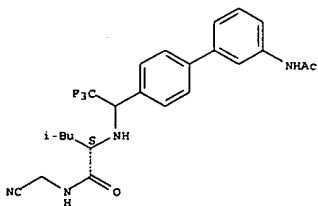
Absolute stereochemistry.



RN 603140-55-2 HCAPLUS
CN Pentanamide, 2-[[[1S]-1-(4'-acetyl[1,1'-biphenyl]-4-yl)-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

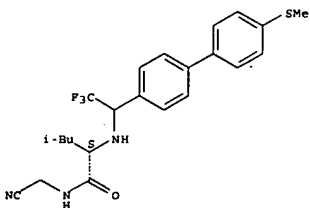
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603140-83-6 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[2,2,2-trifluoro-1-[4'-(methylthio)(1,1'-biphenyl)-4-yl]ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

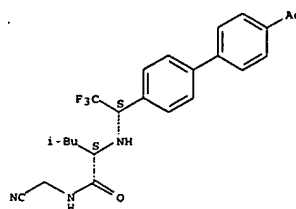
Absolute stereochemistry.



RN 603140-86-9 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-2-[[[1-[4'-(dimethylamino)(1,1'-biphenyl)-4-yl]-2,2,2-trifluoroethyl]amino]-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

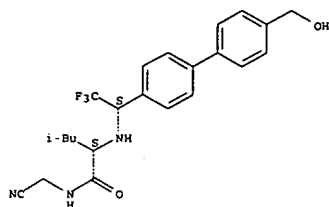
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603140-56-3 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[1S]-2,2,2-trifluoro-1-(4'-(hydroxymethyl)(1,1'-biphenyl)-4-yl)ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

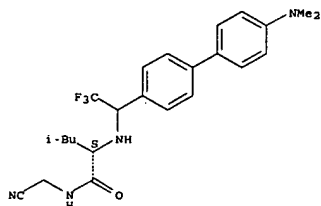
Absolute stereochemistry.



RN 603140-64-3 HCAPLUS
CN Pentanamide, 2-[[[1-[3'-(acetylamino)(1,1'-biphenyl)-4-yl]-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

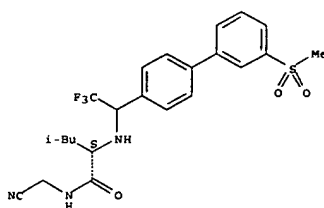
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



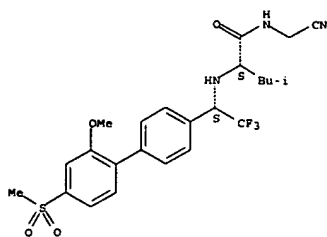
RN 603140-89-2 HCAPLUS
CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[2,2,2-trifluoro-1-[3'-(methylsulfonyl)(1,1'-biphenyl)-4-yl]ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



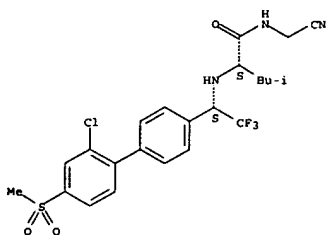
RN 603140-90-5 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxylic acid, 4'-[1-[1-[[[cyanomethyl]amino]carbonyl]-3-methylbutyl]amino]-2,2,2-trifluoroethyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603141-08-8 HCAPLUS
 CN Pentanamide, 2-([(1S)-1-(2'-chloro-4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)-2,2,2-trifluoroethyl]amino)-N-(cyanomethyl)-4-methyl-, (2S)-(9CI)
 (CA INDEX NAME)

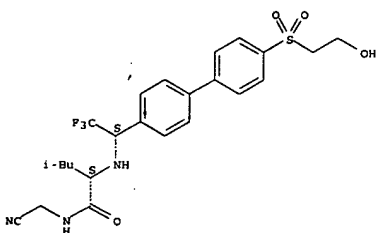
Absolute stereochemistry.



RN 603141-09-9 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-([(1S)-2,2,2-trifluoro-1-[4'-[(2-hydroxyethyl)thio][1,1'-biphenyl]-4-yl]ethyl]amino)-N-(cyanomethyl)-4-methyl-, (2S)-(9CI)
 (CA INDEX NAME)

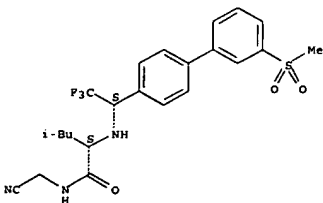
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603141-12-4 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-([(1S)-2,2,2-trifluoro-1-[3'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino)-N-(cyanomethyl)-4-methyl-, (2S)-(9CI)
 (CA INDEX NAME)

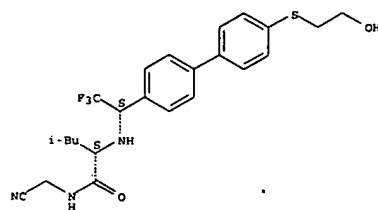
Absolute stereochemistry.



RN 603141-13-5 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-([(1S)-2,2,2-trifluoro-1-[4'-[(2-methoxymethylamino)-2-oxoethyl]sulfonyl][1,1'-biphenyl]-4-yl]ethyl]amino)-N-(cyanomethyl)-4-methyl-, (2S)-(9CI)
 (CA INDEX NAME)

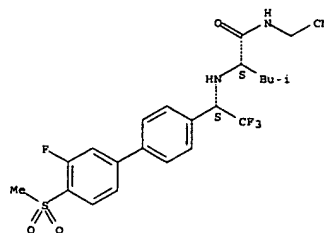
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603141-10-2 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-([(1S)-2,2,2-trifluoro-1-[3'-fluoro-4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]ethyl]amino)-N-(cyanomethyl)-4-methyl-, (2S)-(9CI)
 (CA INDEX NAME)

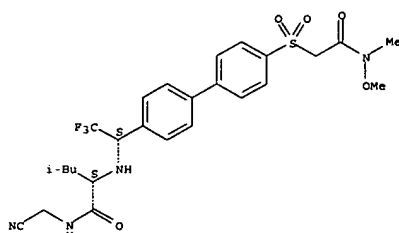
Absolute stereochemistry.



RN 603141-11-3 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-([(1S)-2,2,2-trifluoro-1-[4'-[(2-hydroxyethyl)thio][1,1'-biphenyl]-4-yl]ethyl]amino)-N-(cyanomethyl)-4-methyl-, (2S)-(9CI)
 (CA INDEX NAME)

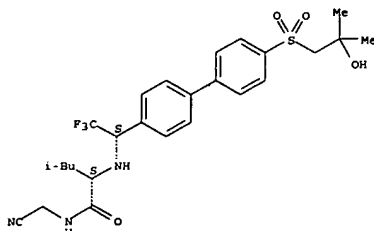
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603141-14-6 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-([(1S)-2,2,2-trifluoro-1-[4'-[(2-hydroxy-2-methylpropyl)sulfonyl][1,1'-biphenyl]-4-yl]ethyl]amino)-N-(cyanomethyl)-4-methyl-, (2S)-(9CI)
 (CA INDEX NAME)

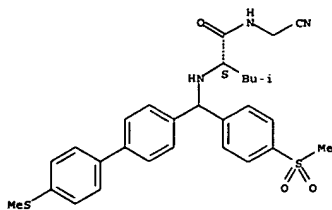
Absolute stereochemistry.



RN 603141-16-8 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-([(1S)-2,2,2-trifluoro-1-[4'-[(2-methoxymethylamino)-2-oxoethyl]sulfonyl][1,1'-biphenyl]-4-yl]ethyl]amino)-N-(cyanomethyl)-4-methyl-, (2S)-(9CI)
 (CA INDEX NAME)

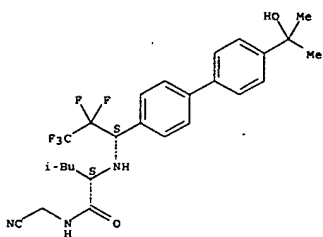
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603141-27-1 HCAPLUS
 CN Pentanamide,
 N-(cyanomethyl)-4-methyl-2-(((1S)-2,2,3,3,3-pentafluoro-1-(4'-(1-hydroxy-1-methylethyl)[1,1'-biphenyl]-4-yl)propyl)amino)-, (2S)-(9CI) (CA INDEX NAME)

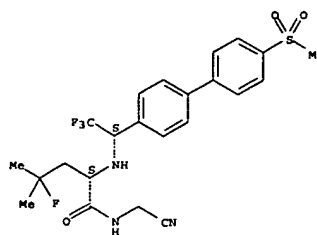
Absolute stereochemistry.



RN 603141-37-3 HCAPLUS
 CN Pentanamide,
 N-(cyanomethyl)-4-methyl-2-(((1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl)amino)-, (2S)-(9CI) (CA INDEX NAME)

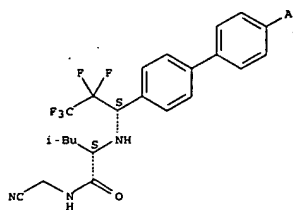
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603141-56-6 HCAPLUS
 CN Pentanamide, 2-(((1S)-1-(4'-acetyl[1,1'-biphenyl]-4-yl)-2,2,3,3,3-pentafluoropropyl)amino)-N-(cyanomethyl)-4-methyl-, (2S)-(9CI) (CA INDEX NAME)

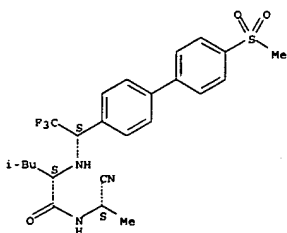
Absolute stereochemistry.



RN 603141-69-1 HCAPLUS
 CN Pentanamide,
 N-[(1S)-1-cyanoethyl]-4-methyl-2-(((1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl)amino)-, (2S)-(9CI) (CA INDEX NAME)

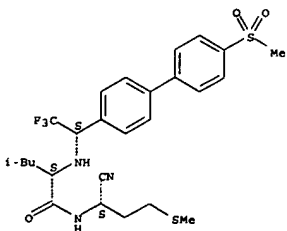
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603141-70-4 HCAPLUS
 CN Pentanamide,
 N-[(1S)-1-cyano-3-(methylthio)propyl]-4-methyl-2-(((1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl)amino)-, (2S)-(9CI) (CA INDEX NAME)

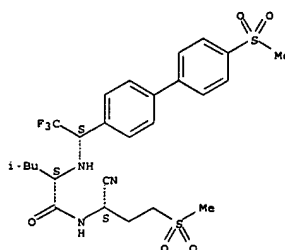
Absolute stereochemistry.



RN 603141-71-5 HCAPLUS
 CN Pentanamide, N-[(1S)-1-cyano-3-(methylsulfonyl)propyl]-4-methyl-2-(((1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl)amino)-, (2S)-(9CI) (CA INDEX NAME)

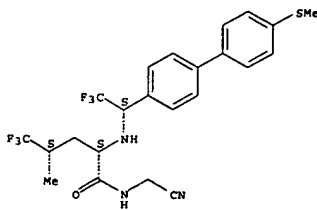
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603141-80-6 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-5,5,5-trifluoro-4-methyl-2-(((1S)-2,2,2-trifluoro-1-(4'-(methylthio)[1,1'-biphenyl]-4-yl)ethyl)amino)-, (2S,4S)-(9CI) (CA INDEX NAME)

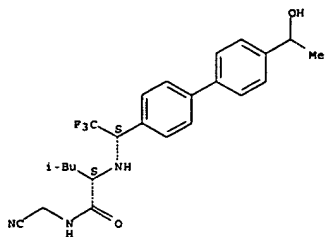
Absolute stereochemistry.



RN 603141-89-5 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-(((1S)-2,2,2-trifluoro-1-(4'-(1-hydroxyethyl)[1,1'-biphenyl]-4-yl)ethyl)amino)-, (2S)-(9CI) (CA INDEX NAME)

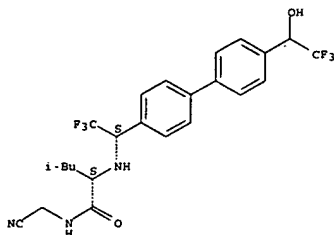
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603141-90-8 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-[4'-(2,2,2-trifluoro-1-hydroxyethyl)]-1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

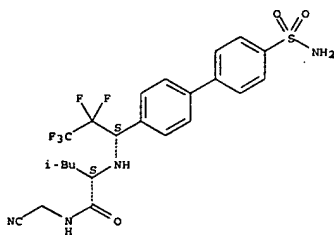
Absolute stereochemistry.



RN 603141-93-1 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-5,5,5-trifluoro-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-[4'-(methylsulfonyl)]-1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S,4R)-(9CI) (CA INDEX NAME)

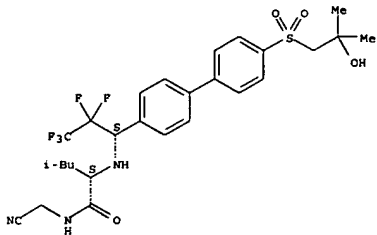
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603142-12-7 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,3,3,3-pentafluoro-1-[4'-(2-hydroxy-2-methylpropyl)sulfonyl]-1,1'-biphenyl]-4-yl]propyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

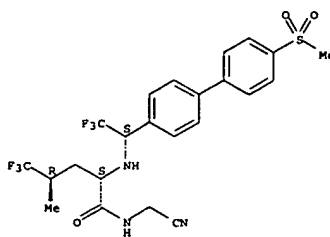
Absolute stereochemistry.



RN 603142-13-8 HCAPLUS
 CN Propanamide, N-(cyanomethyl)-2-[[[(1S)-2,2,2-trifluoro-1-[4'-(methylsulfonyl)]-1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

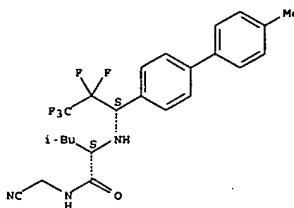
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603141-95-3 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,3,3,3-pentafluoro-1-[4'-(methyl[1,1'-biphenyl]-4-yl]propyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

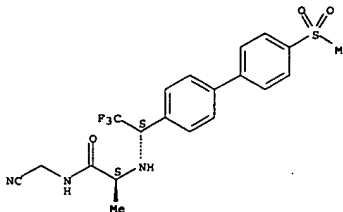
Absolute stereochemistry.



RN 603142-11-6 HCAPLUS
 CN Pentanamide, 2-[[[(1S)-1-[4'-(aminosulfonyl)]-1,1'-biphenyl]-4-yl]-2,2,3,3,3-pentafluoropropyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)-(9CI) (CA INDEX NAME)

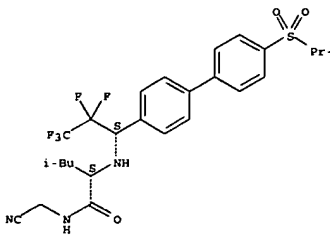
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603142-14-9 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1S)-2,2,3,3,3-pentafluoro-1-[4'-(1-methylethyl)sulfonyl]-1,1'-biphenyl]-4-yl]propyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

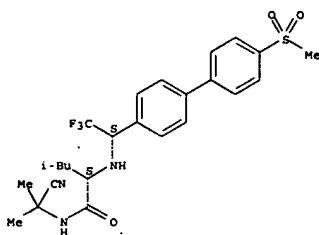
Absolute stereochemistry.



RN 603142-15-0 HCAPLUS
 CN Pentanamide, N-(1-cyano-1-methylethyl)-4-methyl-2-[[[(1S)-2,2,2-trifluoro-1-[4'-(methylsulfonyl)]-1,1'-biphenyl]-4-yl]ethyl]amino]-, (2S)-(9CI) (CA INDEX NAME)

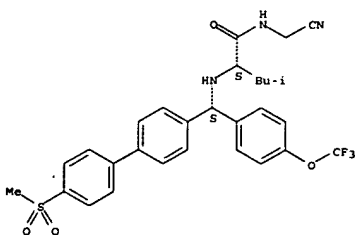
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603142-20-7 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[S]-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl][4-(trifluoromethoxy)phenyl]methyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

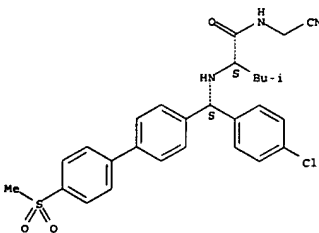
Absolute stereochemistry.



RN 603142-21-8 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[S]-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]-2-thienylmethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

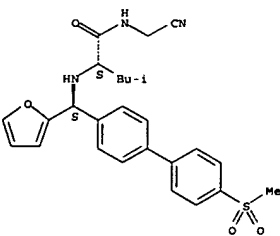
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603142-30-9 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-2-[[[S]-2-furanyl[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]methyl]amino]-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

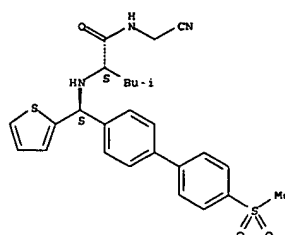
Absolute stereochemistry.



RN 603142-35-4 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[S]-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]-3-thienylmethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

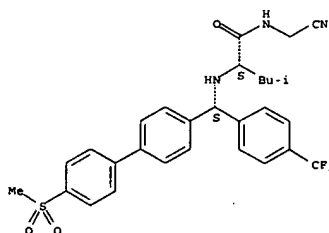
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603142-23-0 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[S]-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl][4-(trifluoromethyl)phenyl]methyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

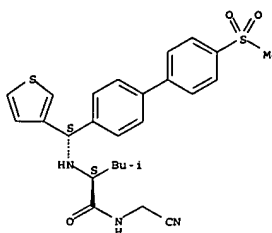
Absolute stereochemistry.



RN 603142-24-1 HCAPLUS
 CN Pentanamide, 2-[[[S]-[4-chlorophenyl][4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]methyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

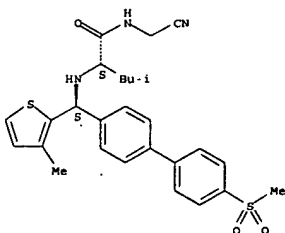
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603142-36-5 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[S]-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl][3-methyl-2-thienyl]methyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

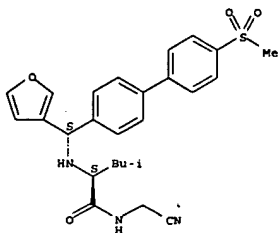
Absolute stereochemistry.



RN 603142-42-3 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-2-[[[S]-3-furanyl[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]methyl]amino]-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

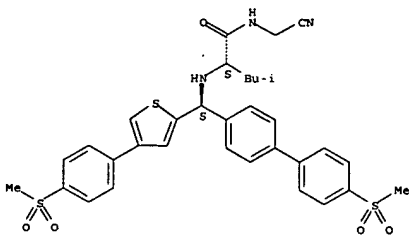
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603142-45-6 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(S)-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]-2-thienylmethylamino]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

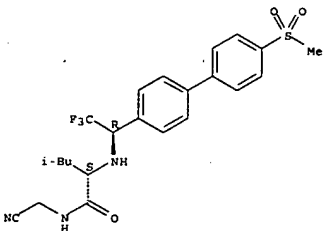


RN 603142-49-0 HCAPLUS
 CN Pentanamide, 2-[[[(S)-[4'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-3-thienylmethylamino]-N-(cyanomethyl)-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

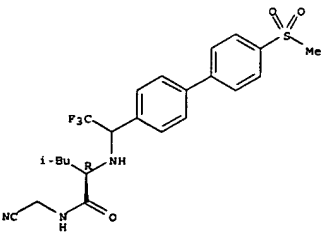
L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Absolute stereochemistry.



RN 603143-36-8 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethylamino]-, (2R)- (9CI) (CA INDEX NAME)

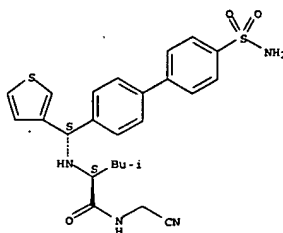
Absolute stereochemistry.



RN 603143-38-0 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethylamino]-, (2R)- (9CI) (CA INDEX NAME)

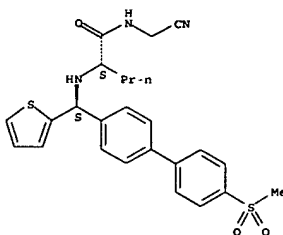
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



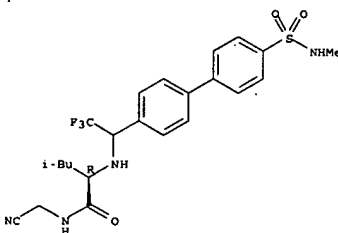
RN 603142-70-7 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-2-[[[(S)-[4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]-2-thienylmethylamino]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



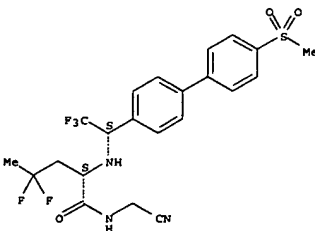
IT 603143-34-6 603143-36-8 603143-38-0
 603143-63-1 603143-64-2 603143-67-5
 603143-94-8 603143-96-0 603143-98-2
 603144-00-9 603145-26-2
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cathepsin cysteine protease inhibitors and their therapeutic use)
 RN 603143-34-6 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[[(1R)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethylamino]-, (2S)- (9CI) (CA INDEX NAME)

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603143-63-1 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4,4-difluoro-2-[[[(1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethylamino]-, (2S)- (9CI) (CA INDEX NAME)

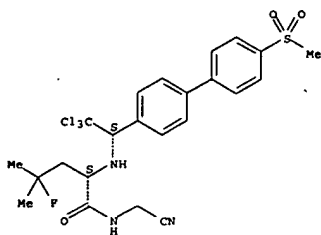
Absolute stereochemistry.



RN 603143-64-2 HCAPLUS
 CN Pentanamide, N-(cyanomethyl)-4-fluoro-4-methyl-2-[[[(1S)-2,2,2-trichloro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethylamino]-, (2S)- (9CI) (CA INDEX NAME)

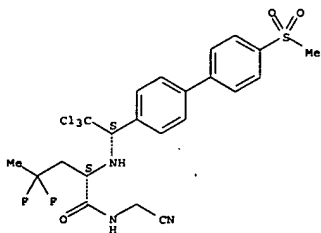
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603143-67-5 HCAPLUS
 CN Pentanamide, N-[(1S)-2,2,2-trichloro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

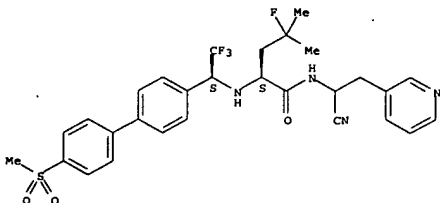
Absolute stereochemistry.



RN 603143-94-8 HCAPLUS
 CN Pentanamide, N-[(1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

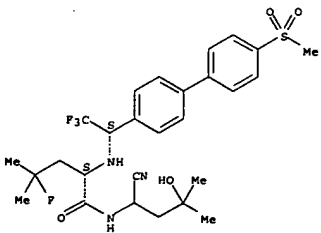
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603144-00-9 HCAPLUS
 CN Pentanamide, N-[(1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

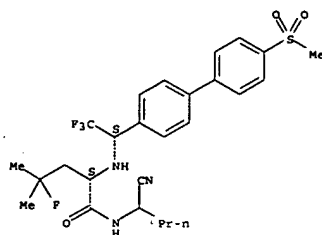
Absolute stereochemistry.



RN 603145-26-2 HCAPLUS
 CN Pentanamide, N-[(1S)-2,2,2-trifluoro-1-(4'-(methylthio)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

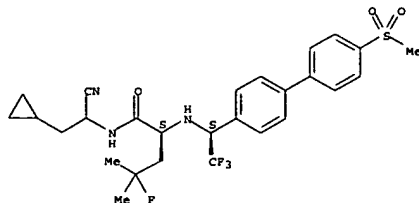
Absolute stereochemistry.

L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 603143-96-0 HCAPLUS
 CN Pentanamide, N-[(1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

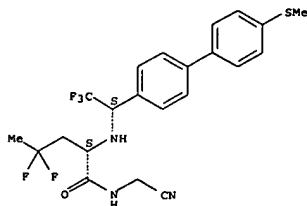
Absolute stereochemistry.



RN 603143-98-2 HCAPLUS
 CN Pentanamide, N-[(1S)-2,2,2-trifluoro-1-(4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl)ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

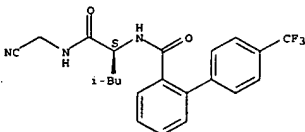
L10 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L10 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN
 ED Entered STN: 22 Sep 2000
 AB Title compds. [R1R2NCRJR4CN; R1 = R11R7NCR5R9X1,
 R11R9NCR6R10X2NR7CR5R9CX1;
 X1, X2 independently = CO, CH2SO2; R5, R6 independently = H, C1-6alkyl;
 R7, R8 independently = H, C1-6alkyl; R9, R10 independently =
 (un)substituted-C1-6alkyl; R9-R7 = trimethylene, tetramethylene,
 phenylene-1,2-dimethylene; R10-R8 = trimethylene, tetramethylene,
 phenylene-1,2-dimethylene; R5-R9 = C3-8cycloalkylene, C3-
 8heterocycloalkylene; R10-R6 = C3-8cycloalkylene,
 C3-8heterocycloalkylene;
 C3-8heterocycloalkylene;
 R11 = X4X5R18; X4 = CO, COCO, SO2; X5 = bond, O, NH; R18 = C1-6alkyl; R2
 =
 H, C1-6alkyl; R3 = H, C1-6alkyl; R4 = CN, COOH, COOC1-6alkyl; R2-R4 =
 trimethylene, tetramethylene, phenylene-1,2-dimethylene; R4-R3 =
 C3-8cycloalkylene, C3-8heterocycloalkylene], N-oxide, prodrug, isomers,
 pharmaceutically acceptable salts, and composition are prepared as
 therapeutically effective estrogen receptor agonist. Title compounds are
 claimed in treating osteoporosis in post-menopausal woman in which
 cathepsin K activity contributes to the pathol. and symptomatol. of the
 disease. Thus, the title compound
 (S)-C6H5CH2OCONHCH(CH2CH(CH3)2)CONHCH2CN
 was prepared
 ACCESSION NUMBER: 2000:666701 HCAPLUS
 DOCUMENT NUMBER: 133:252050
 TITLE: Preparation of novel N-cyanomethyl amide compounds
 and
 compositions as protease inhibitors to treat
 osteoporosis
 INVENTOR(S): Bryant, Clifford M.; Palmer, James T.; Rydzewski,
 Robert M.; Setti, Eduardo L.; Tian, Zong-Qiang;
 Venkatraman, Shankar; Wang, Dan-Xiong
 ACYA Pharmaceuticals, Inc., USA
 PATENT ASSIGNEE(S):
 SOURCE: PCT Int. Appl., 155 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000055126	A2	20000921	WO 2000-US6837	20000315
WO 2000055126	A3	20010222		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RM: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CO, CI, CM, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2368148	A1	20000921	CA 2000-2368148	20000315
EP 1161415	A2	20011212	EP 2000-916375	20000315
EP 1161415	B1	20050713		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

L10 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
 methylbutyl-4'-((trifluoromethyl)- (9CI) (CA INDEX NAME)
 Absolute stereochemistry.



L10 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
 IE, SI, LT, LV, FI, RO
 BR 200009043 A 20020108 BR 2000-9043 20000315
 TR 200103337 T2 20020331 TR 2001-3337 20000315
 TR 200103390 T2 20020521 TR 2001-3390 20000315
 HU 200200347 A2 20020629 HU 2002-347 20000315
 HU 200200503 A2 20020629 HU 2002-503 20000315
 US 6455502 B1 20020924 US 2000-526090 20000315
 TR 200201874 T2 20021021 TR 2002-1874 20000315
 US 6476026 B1 20021105 US 2000-526485 20000315
 JP 2002539192 T 20021119 JP 2000-605557 20000315
 EE 200100487 A 20030217 EE 2001-487 20000315
 AU 769736 B2 20040205 AU 2000-37486 20000315
 PT 1178958 T 20040730 PT 2000-916343 20000315
 EP 1452522 A2 20040901 EP 2004-75486 20000315
 EP 1452522 A3 20050209
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, LT, LV, FI, MK, CY, AL
 ES 2215626 T3 20041016 ES 2000-916343 20000315
 AT 299493 T 20050715 AT 2000-916375 20000315
 ES 2245303 T3 20060101 ES 2000-916375 20000315
 ZA 2001007494 A 20020911 ZA 2001-7494 20010911
 ZA 2001007495 A 20020911 ZA 2001-7495 20010911
 NO 2001004484 A 20011026 NO 2001-4484 20010914
 BG 106013 A 20020531 BG 2001-106013 20011012
 HR 2001000737 A1 20021031 HR 2001-737 20011012
 US 2002086996 A1 20020704 US 2001-17851 20011214
 US 5593327 B2 20030715
 US 2003096796 A1 20030522 US 2002-205600 20030724
 US 200319788 A1 20030626 US 2002-241001 20030909
 US 2004147745 A1 20040729 US 2004-758893 20040115
 US 2007015755 A1 20070118 US 2006-533582 20060920
 PRIORITY APPLN. INFO.: US 1999-124420P P 19990315
 EP 2000-916343 A3 20000315
 US 2000-526090 A1 20000315
 US 2000-526485 A3 20000315
 WO 2000-US6837 W 20000315
 US 2002-205600 B1 20020724
 US 2004-758893 B1 20040115

OTHER SOURCE(S): MARPAT 133:252050
 IT 294622-17-6P
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (Preparation of novel N-cyanomethyl amides and compns. as protease
 inhibitors)
 RN 294622-17-6 HCAPLUS
 CN [1,1'-Biphenyl]-2-carboxamide,
 N-([1S]-1-((cyanomethyl)amino)carbonyl)-3-

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 ED Entered STN: 27 May 1999
 AB N-terminal substituted dipeptide nitriles R(L)X1NHC(R2)C(Y)NHC(R4)R5CN (R
 is optionally substituted aryl, alkyl, alkenyl, alkynyl, heterocyclyl;
 R2,
 R3 = H, optionally substituted alkyl, cycloalkyl, bicycloalkyl, or aryl-
 biaryl-, cycloalkyl, bicycloalkylalkyl; R2 and R3 together represent
 alkylene, optionally interrupted by O, S, or NR6, where R6 is H, alkyl,
 arylalkyl; or R2 or R3 are linked by alkylene to the adjacent nitrogen to
 form a ring; R4, R5 = H, optionally substituted alkyl, arylalkyl, CO2R7,
 CONR7R8 (R7 is optionally substituted alkyl, aryl, arylalkyl, cycloalkyl,
 bicycloalkyl, or heterocyclyl and R8 is H or optionally substituted
 alkyl,
 aryl, arylalkyl, cycloalkyl, bicycloalkyl, heterocyclyl), etc.; R4 and R5
 together represent alkylene, optionally interrupted by O, S, or NR6; X1 =
 CO, CS, SO, SO2, P(O)OR6; Y = O, S, L; L is optionally substituted Het,
 Het-CH2, CH2-Het (Het = O, N, or Si); X = zero or 1) were prepared as
 inhibitors of cysteine cathepsins, e.g., cathepsins B, K, L and S, and
 can
 be used for the treatment of cysteine cathepsin dependent diseases and
 conditions. Thus, N-[2-[(2-carboxyphenyl)methoxy]-1(S)-cyanoethyl]-3-
 methyl-Nu-(2,2-diphenylacetyl)-L-phenylalaninamide was prepared and
 shown to have IC50 = 5 nM for inhibition of cathepsin B.
 ACCESSION NUMBER: 1999:225961 HCAPLUS
 DOCUMENT NUMBER: 130:35253
 TITLE: Synthesis of dipeptide nitriles as inhibitors of
 cysteine cathepsins
 INVENTOR(S): Altmann, Eva; Betachart, Claudia; Gohda, Keigo;
 Horiuchi, Miyuki; Lattmann, Rene; Misabach, Martin;
 Sakaki, Junichi; Takai, Michihiro; Teno, Naoki;
 Cowen,
 Scott Douglas; Greenspan, Paul David; McQuire, Leslie
 Wighton; Tommasi, Ruben Alberto; Van Duzer, John
 Henry
 PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis-Erfindungen
 Verwaltungsgesellschaft mbH
 SOURCE: PCT Int. Appl., 137 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9924460	A2	19990520	WO 1998-EP6937	19981103
WO 9924460	A3	19990902		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RM: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2306313	A1	19990520	CA 1998-2306313	19981103
AU 9914873	A	19990531	AU 1999-14873	19981103
AU 751669	B2	20020822		
EP 1028942	A2	20000823	EP 1998-958887	19981103
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

14/03/2007,10568495c.trn

L10 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
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BR 9813197 A 20000829 BR 1998-13197 19981103
TR 200001189 T2 20000921 TR 2000-200001189 19981103
JP 2001522862 T 20011120 JP 2000-520468 19981103
HU 200004400 A2 20020429 HU 2000-4400 19981103
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ZA 9810073 A 19990505 ZA 1998-10073 19981104
TW 527362 B 20030411 TW 1998-87118553 19981105
NO 2000002320 A 20000704 NO 2000-2320 20000502
US 6353017 B1 20020305 US 2000-643639 20000822
US 2004029814 A1 20040212 US 2003-342872 20030115
US 2004110806 A1 20040610 US 2003-694672 20031028
US 2006235220 A1 20061019 US 2006-374995 20060315
GB 1997-23407 A 19971105
US 1997-108160P P 19971205
US 1997-985973 A 19971205
WO 1998-EP6937 W 19981103
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US 2000-643639 A1 20000822
US 2002-54590 B1 20020122
US 2003-342872 A1 20030115
US 2003-694672 B1 20031028

OTHER SOURCE(S): MARPAT 130:352553
IT 225119-32-4P
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of dipeptide nitriles as inhibitors of cysteine cathepsins)
RN 225119-32-4 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-1-[[[(1S)-1-cyano-3-methylbutylamino]carbonyl]-3-methylbutyl]-4'-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

